

APR 12 2010

Application Serial No. 10/580,479
Reply to final office action of January 20, 2010

PATENT
Docket: CU-4833

Remarks and Arguments

Reconsideration is respectfully requested.

Claims 1-9 are pending in the present application before this amendment. By the present amendment, claims 2-3, 6 and 8-9 have been canceled without prejudice, and claims 1, 4-5 and 7 have been amended, and new claim 10 is added. No new matter has been added.

In the office action (page 4), claims 1-5 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 7,286,671 (Yegin) in view of U.S. Patent No. 6,930,988 (Koodli). The "et al." suffixes are omitted from the Yegin and Koodli reference names.

The applicants respectfully disagree and submit that the claims, as they now stand are in condition for allowance.

The examiner attention is respectfully directed to the amended independent claim 1 that now requires:

a method for performing mobile IPv6 fast level level 2 between access points (APs) and a mobile node (MN) and layer 3 handover between access routers (ARs) and a mobile node (MN), each AR having a subnet composed of at least one access point (AP) that can interface between the MN and each corresponding AR, the method comprising the steps of:

receiving, at a given AR, a modified Router Solicitation (RS) message from the MN after completion of a layer 2 handover between the MN and the given AR, the modified RS message having a message format comprising a 'C' flag signifying that a Care of Address (CoA) is set and which the 'C' flag transmits a source link-layer address option;

transmitting, from the given AR, a general Router Advertisement (RA) message to the MN when the layer 2 handover of the MN occurs between a previously connected AP and a newly connected AP such that the previously connected AP and the newly connected AP both belong to the same subnet of the given AR, wherein the general RA message transmitted from the given AR is for directing the MN to continue using the CoA set by the MN;

generating, at the given AR, a new CoA when layer 3 handover of the MN occurs between the previous connected AP and the newly connected AP such that the previously connected AP does not belong to a subnet of the given AR and the newly connected AP belongs to the subnet of the given connected AR;

performing, at the given AR, a Duplicate Address Detection (DAD) process to inspect a uniqueness of the new CoA wherein the performing step is performed subsequent to the generating step; and

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transmitting, from the given AR to the MN, a modified RA message containing the new CoA to update a network address of the MN, wherein the transmitting step is performed subsequent to the performing step.

Support can be found throughout the specification, and in particular, at page 10, line 29 to page 13, line 5.

Yegin is unlike the presently claimed application. At most Yegin discloses a secure network access method that uses Router Discovery as a carrier to implement the authentication protocols such that the mobile client sends out a solicitation message containing proof of identity of the mobile client. Only when proof of identity of the mobile client is verified will the access router respond and return an advertising message to the mobile client which thereby prevents unauthorized network access. Yegin does not even hint at the step of receiving, at a given AR, a modified Router Solicitation (RS) message from the MN after completion of a layer 2 handover between the MN and the given AR, the modified RS message having a message format comprising a 'C' flag signifying that a Care of Address (CoA) is set and which the 'C' flag transmits a source link-layer address option. It follows that Yegin is also silent with regards to generating, at the given AR, a new CoA when another layer 2 handover of the MN occurs between the previous connected AP and the newly connected AP such that the previously connected AP does not belong to a subnet of the given AR and the newly connected AP belongs to the subnet of the given connected AR. Therefore Yegin is unlike the presently claimed application.

Koodli is also unlike the presently claimed application. At most Koodli discloses a method and system for fast IP connectivity in a mobile network such that the mobile node is configured to determine an unconfirmed address for use on an access router. Upon establishing a link-layer connection and before establishing a network layer connection with the access router, the mobile node employs the unconfirmed address to send an IP packet to the access router. Koodli also does not even hint at the step of receiving, at a given AR, a modified Router Solicitation (RS) message from the MN after completion of a layer 2 handover between the MN and the given AR, the modified RS message having a message format comprising a 'C' flag signifying that a Care of Address (CoA) is set and which the 'C' flag transmits a source link-layer address option.

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It follows that Koodli is also silent with regards to generating, at the given AR, a new CoA when another layer 2 handover of the MN occurs between the previous connected AP and the newly connected AP such that the previously connected AP does not belong to a subnet of the given AR and the newly connected AP belongs to the subnet of the given connected AR. Therefore Koodli is unlike the presently claimed application.

Therefore Yegin and Koodli cannot support an obviousness rejection to the presently claimed application because Yegin and Koodli, in whole or in combination, do not teach or suggest all of the requirements in the presently claimed application. Therefore, the examiner is respectfully requested to withdraw this rejection.

In the office action (page 7), claims 6-9 stand rejected under 35 U.S.C. §103(a) as being obvious over Yegin in view of Koodli, and further in view of U.S. Publication No. 2003/0225892 (Takusagawa). The "et al." suffix is omitted from the Takusagawa reference name.

The applicants respectfully disagree and submit that the claims, as they now stand, are in condition for allowance.

The above comments concerning what Yegin and Koodli teach and do not teach are equally applicable here.

Takusagawa is also unlike the presently claimed application. At most Takusagawa discloses a handover method in mobile communication systems such that an old CoA is assigned to a mobile node of an old access router and immediately before the mobile node enters the communication area of a new access router, a binding update message is transmitted to a diverging point router which is located in a node. Takusagawa also does not even hint at the step of receiving, at a given AR, a modified Router Solicitation (RS) message from the MN after completion of a layer 2 handover between the MN and the given AR, the modified RS message having a message format comprising a 'C' flag signifying that a Care of Address (CoA) is set and which the 'C' flag transmits a source link-layer address option. It follows that Takusagawa is also silent with regards to generating, at the given AR, a new CoA when another layer 2 handover of the MN occurs between the previous connected AP and the newly connected AP such that the previously connected AP does not belong to a subnet of the given AR and the newly connected AP belongs to the subnet of the given connected AR. Therefore

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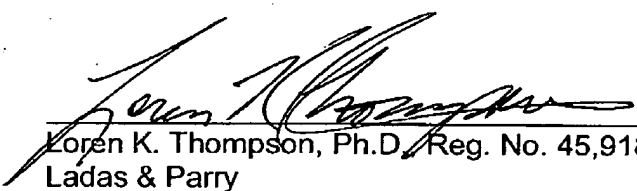
Takusagawa is unlike the presently claimed application.

Therefore combining Takusagawa to Yegin and Koodli does not cure the above noted deficiencies of Yegin and Koodli in replicating the presently claimed application. Accordingly, Yegin, Koodli and Takusagawa cannot support an obviousness rejection to the presently claimed application because Yegin, Koodli and Takusagawa, in whole or in combination, do not teach or suggest all of the requirements in the presently claimed application. Therefore, the examiner is respectfully requested to withdraw this rejection.

For the reasons set forth above, the applicants respectfully submit that claims 1, 4-5, 7 and 10, now pending in this application, are in condition for allowance over the cited references. Accordingly, the applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter. This amendment is considered to be responsive to all points raised in the office action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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